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Professor of Chemistry in the Bellevue Hospital Medical College, New York.

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One of the fragments taken at random from the collection marked "B" which was still more disintegrated than the preceding one, proved on analysis to be composed chiefly of **Urid Acid** and Ammonium Urate, with a trace of Calcium Oxalate.

The contents of the boxes marked "C" consisted chiefly of whitish Crystalline materials. On microscopic examination they exhibited well defined and prismatic crystals, characteristic of "Triple Phosphate." On chemical analysis they were found to consist of Magnesium and Ammonium Phosphate (triple phosphate), Calcium Phosphate, Calcium Carbonate a trace, Sodium and Potassium Salts in traces, Uric Acid and Urates none, Calcium Oxalate none, Organic debris in considerable quantity, and matters foreign to Calculi.

The fragments of Calculi in the collection marked "D" were numerous, and of sizes varying from small fragments to $\frac{7}{8}$ inches in length, $\frac{3}{16}$ inches in width and $\frac{5}{16}$ inches in thickness. Some of the fragments were white and others were gray in color. On chemical analysis they were found to consist partly of the variety known as "Fusible Calculus," Ammonium and Magnesium Phosphate with Calcium Phosphate also, Calcium Phosphate, Calcium Carbonate in traces, Calcium Oxalate in traces, Uric Acid in traces and Organic matter.

The Calculus in collection marked "E" were nodulated and nearly spherical in shape, consisting of Crystalline layers from $\frac{3}{8}$ to $\frac{1}{4}$ of an inch in diameter. They were of a brown color, and on analysis were found to be chiefly Uric Acid, with some Ammonium Urate and traces of Organic matter.

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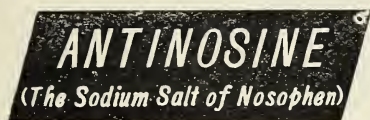


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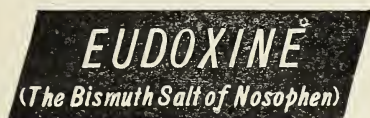
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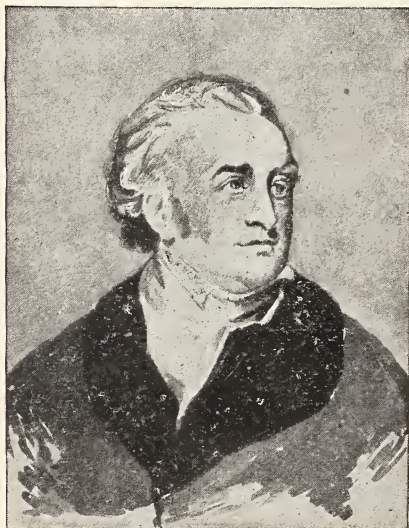
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Original Articles.

THE IMPORTANCE OF LABORATORY METHODS IN DIAGNOSIS.

By Charles E. Simon, M. D.,
Baltimore.

SIXTH PAPER.

The diagnosis of typhoid fever.—The diagnosis of typhoid fever is, as is well-known, not infrequently a most difficult problem. In large hospitals cases may be observed almost daily, where from the clinical history and the results of a physical examination alone, it would practically be an impossibility to establish a definite diagnosis. When the disease sets in with severe nervous symptoms, it is frequently mistaken for cerebro-spinal meningitis. What at first appeared to be a case of acute croupous pneumonia may, in the course of time, turn out to be typhoid fever.

Remittent fever is again and again confounded with typhoid fever. The great difficulty of differentiating acute miliary tuberculosis from typhoid fever is well-known. With the exception of the rose-colored rash, there is not a symptom of typhoid fever which may not also be met with in other acute febrile diseases. The rash, moreover, is not always present and rarely appears before the seventh day. After the middle of the third week it is only found in exceptional cases. The ascending pyrexia in the earlier days of the disease is not always so well pronounced, as is stated in the text-books, and in hospital practice the patients are frequently not seen

before the end of the first or about the beginning of the second week.

Widal's serum test.—To judge from the reports which have thus far been published, it is now possible to diagnose typhoid fever with accuracy in the clinical laboratory. The method is based upon the discovery of Widal that the blood serum of typhoid fever patients possesses the property of inhibiting the movements of the specific bacilli in bouillon culture and of causing their agglutination. By means of a sterilized hypodermic syringe 5 to 6 cc. of blood are obtained from the median basilic vein and placed in a sterilized test-tube, measuring from 10 to 12 cm. in length. The blood is allowed to stand until the serum has separated from the clot. This may be hastened by separating the coagulum from the walls of the tube with a sterilized platinum needle.

By the aid of a sterilized glass pipette eight drops of the serum are best added to 4 cc. of nutrient bouillon, which should be as nearly neutral in reaction as possible. This mixture is then inoculated from a bouillon culture of the typhoid bacillus, 24 hours old, and kept as a temperature of 37°C. (98½°F.) for 24 hours. At the end of this time the bouil-

lon will be absolutely clear, or very nearly so, while little flakes, composed of the bacilli, will be seen at the bottom and adhering to the sides of the tube, providing that the case under consideration is one of typhoid fever. Otherwise it will be observed that the bouillon is uniformly cloudy, and that a sediment proper does not occur.

In some cases the appearance of the bouillon is peculiar. Innumerable macroscopic, dust-like particles will be seen throughout the fluid, which, however, can be readily distinguished from the cloudy appearance of non-typhoidal specimens. It is thought that this result is obtained in cases of intense infection with the bacterium coli. Should any doubt arise it is only necessary to keep such tubes for a few hours longer at a temperature of 37° C. ($98\frac{2}{3}^{\circ}$ F.) when it will be seen that the dust-like aspect has disappeared and has given place to the ordinary cloudy appearance observed in cases which are not typhoid fever.

Widal suggests that a microscopic examination be also made in every instance. This is not necessary; the macroscopic test is perfectly sufficient. If a drop of the mixture be examined with an oil immersion lens, pretty large heaps of agglutinated, motionless bacilli will be found evenly scattered throughout the field of vision, while the interspaces are either entirely free from bacilli, or very nearly so. This appearance is only found in cases of typhoid fever.

Unfortunately this method, while it appears to be entirely reliable, and while it is certainly simple enough in itself, will scarcely become popular among practitioners, as a fresh culture of the typhoid bacillus must be available. In Baltimore such examinations are fortunately made for the general practitioner by the bacteriologist of the Health Department and it is to be hoped that every physician will make use of the opportunity in doubtful cases. He should, however, make every effort to reach a correct diagnosis himself. To this end the blood should be examined for the presence of malarial organisms,

as described in a previous paper, as this disease is, in our latitudes, more frequently mistaken for typhoid fever, and *vice versa*, than any other. The urine, moreover, should be tested according to Ehrlich's method.

Ehrlich's reaction.—Two solutions, which should be kept in separate bottles, are necessary. The one should contain 50 cc. of hydrochloric acid, diluted to 1000 cc. with water and saturated with sulphanilic acid. The other is a 0.5 per cent. solution of sodium nitrite. Forty cc. of the sulphanilic acid solution are treated with 1 cc. of the sodium nitrite solution, when the mixture is thoroughly shaken. A test-tube is then filled to one-third its capacity with the urine to be examined and mixed with an equal volume of the reagent. One to two cc. of ammonia are then added by means of a pipette, so as to form a layer above the mixture. At the zone of contact a more or less pronounced orange ring will be observed if the urine employed was normal.

Under pathological conditions, and notably so in typhoid fever, a distinct carmine color is seen instead. This reaction, when first discovered, was thought to be absolutely pathognomonic of typhoid fever. Later researches, however, have shown that it is at times also obtained in other diseases. It has thus been observed in cases of measles, scarlatina, erysipelas, acute miliary tuberculosis, severe pneumonia, smallpox, phthisis, septicemia, etc. In all these diseases, however, the reaction is by no means constant, and the great majority can be readily distinguished from typhoid fever. The only two diseases which concern us, in which the reaction may be obtained and which may be confounded with typhoid fever, are pneumonia and acute miliary tuberculosis. In the former the reaction is only exceptionally observed and if we remember that a marked degree of hyperleucocytosis is practically the rule in pneumonia, while the number of leucocytes varies but little from the normal standard in typhoid fever, it will rarely be difficult to differentiate the two diseases from each other. In acute miliary

tuberculosis this is more difficult if the patient does not come under observation during the first two weeks. If, however, the patient is seen in this time, a positive reaction may probably always be regarded as indicating the existence of typhoid fever. In cases of acute tuberculosis the writer has never met with the reaction earlier than the beginning of the third week. In such cases, moreover, it generally persists to the fatal end, while in typhoid fever it is rarely observed after the twenty-first day of the disease.

It is true that the reaction is not always present, even in typhoid fever, but such cases are exceptional and always mild. In almost all cases it may be obtained as early as the fifth day and it is the writer's experience that a positive reaction between the fifth and the ninth day, when taken in conjunction with a negative examination of the blood and sputum, may be regarded as indicating the existence of typhoid fever. Its value as a diagnostic aid is certainly greater than that of the rose-colored rash.

In this connection the writer wishes to draw attention to a slight modification of the test which he regards as most valuable. If any doubt should arise as to the presence or absence of the reaction, *i. e.*, as to the color of the ring, the test-tube should be emptied into a porcelain basin, filled with water. The reaction may then be regarded as positive if the water is colored a distinct salmon-red, while an orange color

only is obtained if the reaction is negative.

Leucocytosis.—It has been mentioned above that in typhoid fever the number of leucocytes is practically normal, *i. e.*, there are about 6000 in the cb. mm. of blood. By remembering this fact we are not only placed in a position where we can differentiate typhoid fever from other diseases in which a typical hyperleucocytosis (increased number of leucocytes) is observed, but we can also detect the occurrence of special complications of an acute inflammatory character. An examination in this direction is hence likewise of great importance.

To the practitioner who cannot avail himself of special laboratory facilities the writer would suggest that in every acute febrile disease where the diagnosis is not clear at once, the blood be carefully examined for malarial organisms and the urine be tested daily according to Ehrlich's method. A correct diagnosis may then be reached in the great majority of cases and the rate of mortality from "pernicious malarial fever" lowered. An examination of the sputum for tubercle bacilli and an enumeration of the white corpuscles of the blood will further serve to differentiate the disease from phthisis and septic conditions respectively. For the country physician it would be most important to establish a State bacteriological and chemical laboratory where specimens could be sent for examination. Returns could be supplied within forty-eight hours.

FOUND DRUNK.

THE *Boston Medical and Surgical Journal*, in describing the treatment of "drunk" cases, says that when the police in Denmark find any one in the streets drunk and incapable they take him in a cab to the station, where he gets sober under a surgeon's care. On recovering sobriety the police take him home. A bill for the services of the cabmen, the surgeon and the police agents for special duty is then presented to the host of the establishment where the patient took his last drink.

In Turkey, if a Turk falls down in the street while intoxicated and is arrested, he is sentenced to the bastinado, which punishment is repeated as far as the third offence. After the third bastinadoing he is considered to be incorrigible and is called "Imperial," or "privileged" drunkard. If arrested after that he has only to give his name and address and state that he is a "privileged" drunkard, when he is released and conducted home, the bill for these kindnesses being rendered to him for payment next day.

THE TREATMENT OF SYPHILIS.

By Henry Alfred Robbins, M. D.,

Washington, D. C.

CLINICAL LECTURE DELIVERED AT THE SOUTH WASHINGTON (D. C.) FREE DISPENSARY, DECEMBER 7, 1896.

THIRD PAPER.

THIS colored man, aged 35 years, who has just entered our service for treatment, gives promise of being a peculiarly interesting case, illustrating the ravages caused by syphilis. To appreciate at a glance what is presented to you, it is necessary to be well versed in syphilography. Unless you have been properly instructed, and as it were have your knowledge at your finger ends, you will in general practice be treating many cases for other diseases, which in reality are only the manifestations of the protean forms of syphilis.

We will ask the patient to walk across the room. You notice that his right arm hangs limp by his side, and that it is with considerable effort he lifts and swings his right knee, with the big toe of the foot pointed inwards.

Syphilis causes genuine apoplectic attacks with succeeding hemiplegia, as you find in this man. Not long ago I read a paper before the Medical Society of the District, in which I gave examples. Dana of New York says that syphilis causes one-third of all cases of apoplexy. There are changes in the cerebral arteries, diminishing their caliber, etc. The brain is also the seat of tumors known as gummata, but it does not require one skilled in brain surgery to remove them.

Dr. Dowse, in speaking of iodide of potassium, says: "The physician commands this drug to carry out his object, and it does it, too, as surely, as completely and effectually as the surgeon's knife in excising a tumor."

You will notice, if you hereafter see much of syphilis, that hemiplegia due to syphilis is nearly always on the right side. Aphasia is not uncommon. This man, however, is not at a loss for words, nor does he make use of wrong ones. He is very complimentary, and very voluble, and has "a pat-you-on-the-

head, and bless-you-my-children" style of oratory. Now observe the eruption on his forehead. It is what is called the ulcerative pustular syphiloderm, the pustules varying in form and color. Some are covered with crusts. My colleague, Dr. Arwine, lifts one with a pin, and you notice a yellowish puriform secretion. The late Professor von Zeissel, whose service I belonged to in Vienna, used to liken this syphiloderm to "little islands floating in their own pus." They are destructive and leave permanent scars.

Of all the various forms of treatment of syphilis, I prefer the Vienna method and that is the inunction. Generally, and always at Vienna, the mercurial ointment is used. When I am sure that I can get the oleate of mercury (10 per cent.) properly made, I prefer that, but unless it is properly and freshly made, it sometimes acts as an escharotic. As we do not have the patient under our own control, to see that the method is properly carried out, we will give him our tertiary mixture, and apply to the forehead on ointment containing calomel $\bar{3}$ j, zinc ointment $\bar{3}$ j.

November 23. This colored girl, aged 25 years, has just put in an appearance for treatment. You find that she has enlargement of the posterior cervical, submaxillary and epitrochlear glands. You notice located on the neck, over the sterno-mastoid region, a large, flat tumor, which she says is painful. If it is what we think, pain is a very unusual accompaniment. To our eyes, and finger ends, it can not be mistaken for anything but a gummy tumor. Any pressure on a cutaneous nerve may cause pain, especially upon the skull, where gummy tumors are occasionally found. In this case we can account for it, by the frequent applications of the tincture of iodine, which have been

made. Some one not well versed in syphilis has mistaken this tumor for an abscess. Why tincture of iodine is always applied to a suspected abscess I can not comprehend. In my hands it has proved worse than useless in aborting a boil or abscess, and no one but an idiot would apply it to a gummy tumor. I have ceased to be astonished at anything after seeing a medical man poultice a gummy tumor, and with a profound air, order syrup of hydriodic acid.

A gummy tumor is the most characteristic manifestation of tertiary syphilis. They rarely develop before the third or fourth year after acquiring the disease. They are met with not only on the tegumentary surface, but post-mortems have revealed them in the brain, heart, lungs, liver, stomach, spleen and kidneys, as I described in a paper called "Syphilis of the Vital Organs."

What is a gummy tumor? It is a cell infiltration in the subcutaneous cellular tissue. After the formative stage under the skin, if not properly treated, it will go on to the ulcerative stage, and sometimes is attacked with gangrene and phagedena.

This case seems easy enough to diagnose, as the girl has enlarged glands, and she says that three years ago she had a sore on her genitals, which was followed by a "waxing kernal."

Gummatous tumors have been mistaken for cancer, and have been removed by the knife. I referred to this in a paper that I read before the Medical Society, entitled "Lues Venerea." I gave examples, and could have given more. Only yesterday I came across a clinical lecture of Professor von Esmarch, in which he stated that an American had consulted him who had "his penis, the scrotum, and the testes, as well as a large piece of the abdominal skin, cut away." Our surgeons of the Pacific slope had regarded the case as carcinoma, and had made as good a eunuch of him as you can find in Constantinople. After castrating him, they fixed him so that the only way he could be re-infected by syphilis

was in a non-venereal manner. Our California surgeons failed to see unmistakable evidences of syphilis, so von Esmarch stated.

What can you expect when syphilology is not considered of sufficient importance to be taught in our medical schools? The very name is so offensive to the ears and eyes of our professors that it is never spoken, and never printed in their catalogues.

The old world makes mistakes too. In my paper "Lues Venerea," I quoted the following from Maissoneuve:

"A patient underwent a serious operation for a supposed encephaloid cancer of the pharynx. After six months the tumor began to grow again, and grew so rapidly that the patient was given up in despair, and sent to the hospital to die. When examined upon his entrance, an enormous tumor was found occupying the left lateral region of the neck and the entire parotid gland. It projected into the pharynx, obliterated the velum palati, and threatened the patient with death by asphyxia. Under specific treatment, the tumor vanished without leaving a vestige."

This morning I received part III of the Pictorial Atlas of Skin Diseases, and Syphilitic Affections—taken from photo-lithochromes of the models in the Museum of the Saint Louis Hospital, Paris.

It contained, among other superb illustrations, a colored photo-lithochrome of a broken-down ulcerative syphilitic gumma of the thigh. This patient was a man aged thirty-nine years.

The patient went to a hospital and was admitted to a surgical ward. He states that the surgeon thought of operating on him, and even auscultated his thigh "to hear pulsations"; so it seems possible that an aneurism was suspected. However, after two surgeons had consulted together, the operation was abandoned, and he was discharged, with means of treatment directed mainly towards his pains (opiates internally, belladonna plaster on the thigh, etc.).

In one month he returned to the hospital, in a worse condition. "A different surgeon from those who first saw him

now attended him. The thigh was now massive and hard, but the skin was purple, the ecchymoses having partially disappeared. Probably the new surgeon diagnosed a malignant tumor—likely enough an osteo-sarcoma—for he proposed to the patient *the amputation of his leg at the hip joint.* Terrified, the patient left the hospital.

"A few weeks afterwards (December, 1890), the poor fellow was sent to the Saint Louis Hospital. The appearance of the lesions, as we have already described them, left no room for doubt as to their nature. Despite the lack of evidence of antecedent syphilis, and denials of the patient, the diagnosis of syphilis was made, and specific treatment instituted. This treatment consisted of daily mercurial inunction (mercurial ointment, four grammes (3i), and of iodide of potassium, of which the patient took at first two (3ss), then three (gr. xlv), and finally four grammes (3i), daily. The disease, which had lasted for two years, was cured in two months.

In my paper (*Lues Venerea*) I wrote as follows: "Gummy tumors have been diagnosed to be sarcomata, and the ever ready knife of the surgeon brought into use, but the happy administration of the proper treatment has caused them to melt away, like snow under the midday sun." So far I have not been called to account for thus indulging in poetic license.

We will apply the oleate of mercury, ten per cent., to this tumor, and give the girl our tertiary mixture, and when you see her again you will, I suspect, find that the tumor has melted away, without leaving a vestige.

November 25.—This white woman, who appears to be about thirty years old, has brought her girl baby, aged eight months, for us to treat the infant's hand.

Before Dr. Arwine removes the dressings, we will call your attention to the unusual formation of the infant's skull. There is a bulging out of the frontal bone, and a general lack of symmetry. You will notice that its eyes are bright, and there is no evidence of its having

had interstitial keratitis, and the mother says that it has never had ear trouble, and there does not appear to have been an arrest of development. You notice, about the commissures of the lips, little groups of vesicles, which look herpetic. Let us examine the mouth. We see irregular grayish-white patches, which have the appearance of having been brushed over with a solution of nitrate of silver. These are called opaline patches, because they resemble the opal, and they are characteristic of syphilis. On examining the hand, what do we find? A most typical case of what is called dactylitis syphilitica, called so from the Greek word meaning finger.

Nélaton reported two cases about thirty years ago, and ten or eleven years later Dr. R. W. Taylor wrote an essay on the subject in his usual masterly way. The acquired form is very rare. Only five cases had been reported up to the time that Dr. Taylor wrote his paper on the subject. You will observe that the upper phalanges of the index middle and ring fingers appear to be gummatous. They feel gummy and are puffed out more than twice their normal size, and at the end of the index finger there is a deep ulcer, and it looks as if there might be necrosis of the lower phalanx. The doctor is dressing it with iodoform gauze. We will photograph this case, if possible. We will give the little patient $\frac{1}{2}$ grain doses of hydrargyrum cum creta, and will tell the mother to keep its bellyband smeared with mercurial ointment.

Let us question the mother. You notice that she is good looking and apparently healthy. She has had five children, no miscarriages. She says that all have been healthy, except this last one; it had a breaking out, shortly after birth, and the child has constantly had "a cold in the head." She says that her husband is a healthy man, has had no skin trouble, no rheumatism, etc.

As this woman looks so well, we would, if we had time, call your attention to the law of Colles. That is where a healthy woman can give birth to a syphilitic child. Dr. R. W. Taylor has given

examples, where such appears to have been the case. We will refer to that in a lecture, when we do not have to keep

patients waiting. We will investigate still further, and report on some future clinic day.

THE "SCHOTT METHOD" OF GYMNASTICS IN CHRONIC HEART DISEASE.

By Solomon Solis-Cohen, M. D.,

Professor of Clinical Medicine and Therapeutics at the Philadelphia Polyclinic and College for Graduates in Medicine; Physician to the Philadelphia Hospital, etc.

ASSISTED BY

Dr. Charlotte West,

Clinical Assistant in the Medical Department of the Philadelphia Polyclinic.

READ BEFORE THE PHILADELPHIA COUNTY MEDICAL SOCIETY, JANUARY 27, 1897.

THE treatment to which I desire to call attention of the Society is a portion of the so-called Nauheim treatment of cardiac disease, which was inaugurated some twenty years ago by Drs. August and Theodor Schott, and has recently found its way into English literature. Dr. August Schott, now deceased, published his first paper in the *Berliner Klinische Wochenschrift*, in 1880. Dr. Theodor Schott published his first paper in the same journal in 1883. Since that time both the brothers Schott have published several monographs and journal articles on various phases of the subject, and in 1891, at the instance of Dr. Bezley Thorne, Dr. Theodor Schott communicated to the *Lancet* a brief account of his methods. Dr. Thorne published a monograph on the subject in 1895, and for the last two years, probably because of the great success that Dr. Thorne has been having in London, in the treatment of chronic diseases of the heart by the Nauheim methods, the *British Medical Journal* has been pretty well filled with papers upon this theme. Several eminent British physicians, among them Sir William Broadbent and Sir T. Grainger Stewart, have visited Bad Nauheim and recorded their observations, all very much in favor of the method and confirming the scientific character of the observations of the brothers Schott. In fact, a very noticeable feature of these reports is the praise accorded to these gentlemen for their

moderation in statement and their carefulness in observation; particularly when we consider the really wonderful nature of the recoveries that they report. The treatment carried out at Nauheim is directed toward the relief of the damaged heart, in cases of dilatation or ruptured compensation associated with valvular lesions, by action upon the peripheral vessels and blood spaces; partly through the effect of thermal, saline and carbonated baths, and partly by a special system of gentle muscular exercise, which, with the assistance of Dr. West, I shall partially demonstrate this evening. The baths are an important but not an essential portion of the treatment — that is to say, the exercises will do a great deal alone, as we have experienced in four cases. In some instances the baths alone are said to have been successful. At Nauheim, the baths are given in gradually increasing strength in the natural waters, which are of various temperatures and carbonated, containing likewise a number of alkaline and iron salts. Dr. Schott and Dr. Thorne both say, however, that the essentials of the baths can be artificially reproduced by the use of heat and the appropriate reagents, and give formulas for the purpose, chiefly calling for the use of sodium and calcium chlorides, and free carbon dioxide; the latter being released from reservoirs, or evolved in the bath by the use of sodium bicarbonate and hydrochloric acid. I hope soon to

have facilities for observation with these artificial baths, but up to this time I have nothing special to report concerning them, and therefore shall confine my remarks this evening to the exercises. I was under the impression — until I hunted up the literature — that my lecture and demonstration at the Philadelphia Hospital in November last, late as it was, had been the first American contribution to the subject, but I find that Dr. Robert H. Babcock of Chicago published a communication in the *Journal of the American Medical Association* for 1893, Dr. Babcock himself having been a patient of Dr. Schott's, and reporting his own case and some other cases on his return to America. One feels somewhat chagrined at his own tardiness when he reads this communication and the others referred to.

The method of exercise is called by Dr. Schott *Widerstandsgymnastik* — resistance-gymnastics. Perhaps the best way to English this term would be to call it *resistance-exercises*, but this alone would not convey the idea. "Swedish movements" are resistance-exercises, too; but this system is differently carried out. "Gently-resisted movements" would perhaps convey the idea better. The patient makes very slight efforts with various muscles, and these are resisted by the operator very gently. As the treatment progresses the resistance is increased, calling upon the patient to put forth great exertion. There is a course of exercises laid down by Dr. Schott, the whole occupying from thirty minutes to one hour, but the number and degree of movements are varied according to the patient's requirements. With my patients only twenty minutes' exercise has thus far been attempted.

Dr. Schott says that his system consists of slow movements made by the patient and resisted by the operator, short intervals being allowed for rest. The exertion should be small and the patient should be loosely clothed and told to breathe quietly. This matter of quiet breathing is quite important. It must be watched and controlled by the operator. The resistance should not be

of such a kind as to prevent the patient feeling master of the situation. The operator must not grasp or in any wise constrict the limb, but oppose by the hand held flatly. The following rules are laid down :

1. Each movement is to be performed slowly and evenly, that is, at a uniform rate.

2. No movement is to be repeated twice in succession in the same limb or group of muscles.

3. Each single or combined movement is to be followed by an interval of rest.

4. The movements are not allowed to accelerate the patient's breathing, and the operator must watch the face for the slightest indications of (a) dilatation of the alae nasi ; (b) drawing of the corners of the mouth ; (c) duskiness or pallor of the cheeks and lips ; (d) yawning ; (e) sweating ; and (f) palpitation.

5. The appearance of any of the above signs should be the signal for immediately interrupting the movements in process of execution and for either supporting the limb which is being moved, or allowing it to subside into a state of rest.

6. The patient must be directed to breathe regularly and uninterruptedly and should he find any difficulty in doing so, or for some reason show a tendency to hold his breath, he must be instructed to continue counting in a whisper during the progress of each movement.

No limb or portion of the body of the patient is to be so constricted as to check the flow of blood.

The physiological effect and therapeutic object of these procedures are to accelerate the flow of blood through the vessels and diminish the work thrown upon the heart, allowing its chambers to contract more readily—hence the importance of attending strictly to the details mentioned.

The exercises consist in motions with the limbs, hands, feet and trunk, made against slight resistance. They are so devised as to call into operation, according to a definite order and succession, nearly every voluntary muscle and system of muscles in the body. While this

order has been carefully worked out by the brothers Schott as the result of long experience, the physician is to use his judgment as to which exercises are to be used and which omitted in any particular case. The system advised begins with the upper extremities, goes to the trunk, then to the lower extremities and concludes with a return to the upper extremities. The motions include extension, flexion and rotation or circumduction.

As already stated, the movements are carried out in a certain definite system, uniformly with intervals of rest after each movement and with gentle resistance upon the part of the operator, who carefully watches the effect so that the patient shall not be exhausted. The operator especially regulates the patient's breathing (which is not allowed to become accelerated) and the color of the face; hurried breathing, even distention of the nostrils, flushing, pallor, or sweating, being a signal for interruption or cessation. In suspending the treatment, the operator's judgment decides whether to support the part being exercised in the position it has assumed, or to allow it to return gently to a position of normal rest. So too, while it is best for the patient to stand, he may sit or lie when too feeble to begin treatment otherwise.

The following is the list of exercises :

1. Arms extended in front of body on a level with shoulder, hands meeting; arms carried out until in line and brought back to original position.

2. Arms hanging at sides, palms forward; arm flexed at elbow until tips of fingers touch shoulder, back to original position; one arm only moved at a time.

3. Arms down, palms forward, arms carried outwards and upwards until thumbs meet overhead; back to original position.

4. Hands in front of abdomen, fingers flexed so that second phalanges touch those of opposite hand; arms raised until hands rest on top of head; back to original position.

5. Arms down, palms against thighs, arms raised in parallel planes as high as possible; back to original position.

6. Trunk flexed on hips; return to original position.

7. Trunk rotated to left—to right; return to original position.

8. Trunk flexed laterally.

9. As No. 1, but with fists clinched.

10. As No. 2, but fists clinched.

11. Arms down, palms against thighs, each in turn raised forwards and upwards until arm is alongside of ear, then turned outward; arm descends backwards.

12. Arms down, palms to thighs, both together moved backwards in parallel planes as far as possible without bending the trunk forward.

13. Thighs in turn flexed on trunk, opposite hand resting on chair.

14. Lower extremities in turn extended fully and bent on trunk forwards and backwards to extreme limits of movements, opposite hand resting on chair.

15. Legs in turn flexed on thigh, both hands on chair.

16. Feet together, lower extremities in turn abducted so far as possible and brought back to original position, opposite hand on chair.

17. The arms extended horizontally outwards, are rotated from the shoulder joint to the extreme limits forwards and backwards.

18. The hands in turn are extended and flexed on the forearm to extreme limits and brought back in line with arm.

19. The feet in turn are flexed and extended to extreme limits and then brought back to their natural position.

The duration of the exercises is from twenty minutes to an hour and a half, an hour being the average at Nauheim even in the beginning. The following are the results stated to be obtained by the baths and exercises at Nauheim :

(1) Diminution in the frequency of the pulse, with increase in its force and fullness; (2) Contraction of the heart, as shown by the diminution of the area of cardiac dulness and recession of the apex-beat upward and toward the median line. (3) Slower and deeper breathing with a sense of lightness and relief in the chest; (4) A better color of

the lips and improved facial aspect; and (5) when that organ has been congested, a marked diminution in the size of the liver. Furthermore, after a few days of systematic administration of the exercises, there is usually observed marked and often long-maintained diuresis.

Dr. W. Bezley Thorne says: "The results, in fact, are such as would scarcely be believed by anyone but an eye-witness. It is by no means uncommon in cases of dilatation to see within one hour the oblique long diameter of the heart's area of dulness diminish by from three-quarters of an inch to an inch and a quarter and, perhaps, more surprising still, to observe a diminution of as many as two inches, in vertical measurement, of a liver which at first extended to the umbilical level; and to hear the patient, at the conclusion of what cannot be described as an ordeal, volunteer the statement that a load has been removed from the precordia, that he breathes easier and more deeply and experiences a sense of general relief. Such gains are not permanent and in the time that intervenes before the next day's exercises or baths, as the case may be, the dilated and congested organs tend to their former size, but do not wholly relapse. A slight proportion of the gain is held and succeeding increments until, as the result of treatment, perhaps at the end of a few weeks, the dilated heart and the congested liver have recovered their normal dimensions, or at any rate such contraction and compensatory power in the one case and resolution in the other, as to make them practically sound."

Sir T. Grainger Stewart concludes as the result of personal observation with the Nauheim treatment:

"1. That in a large proportion of cases it effects immediate improvement in the condition of the heart, as shown by percussion and auscultation; the sounds becoming more distinct and the area of dulness diminishing to a greater or less extent.

"2. That in many cases the rhythm of the pulse improves and the beat becomes more vigorous.

"3. That while the immediate effect

is in so far temporary, the heart rarely goes back to its previous condition of dilatation, but remains somewhat smaller than it had been before the exercises and that gradually improvement of a lasting kind sets in, so that the heart recovers its tone and the area of dulness permanently diminishes."

As to the effect in cases of valvular lesions, it is stated that in the course of the first few movements a bruit due to stenosis is observed to be accentuated, that afterwards diminishes, as the peripheral resistance lessens. In our case the accentuation of the bruit has remained, the sound at first having been but faintly heard, owing to the weakness of the cardiac muscle, and its greater audibility now being interpreted as a sign of increased muscular vigor. Indeed it is urged as a diagnostic merit of the method that valvular lesions previously unsuspected may become recognizable by the development of murmurs during treatment. Murmurs due to insufficiency other than that caused by actual lesion of the valves are diminished in intensity, modified to duplication and finally obliterated. In cases of early valvular lesions, the murmurs are said to disappear as the final result of treatment. The condition of the cardiac muscle is so much improved in the long-continued cases that I have had under observation that we may readily believe the statement that in early cases all traces of myocarditis are removed.

The counter-indications against the treatment in the entire range of chronic cardio-vascular affections are advanced arterio-sclerosis, decided degeneration of the cardiac muscle and aneurism. Some of the conditions earlier deemed counter-indications are not now so considered. Thus, in the patient before you this evening, a quite advanced case of arterio-sclerosis, the exercises have certainly done much good. The only absolute counter-indications that remain generally insisted on are marked atheroma, as with pipe-stem arteries, and advanced cases of aneurism in which clots might be loosened and emboli thrown out into the circulation. One should, however, be cautious until he has had sufficient ex-

perience to decide for himself. It might be very rash for me to apply the method in a case Dr. Schott might so treat with benefit.

Dr. Thorne states that he has witnessed improvement amounting to practical or actual cure in cases presenting the physical signs usually regarded as indicative of the following affections; stenosis of either the aortic or the mitral orifice, stenosis of both; insufficiency of either or both; with attendant dilatation; dilatation consequent on myocarditis, on habitual hemorrhage and on constitutional anemia; fatty heart (interstitial); weakened heart; congenital mitral insufficiency; patent foramen ovale; and angina pectoris of apparently both neurotic and organic causation. He adds that "it is reasonable to assume that measures, calculated to diminish peripheral resistance, and to promote the nutrition and repair of the cardiovascular tissues, must be applicable to at least the early stages of aneurism of the heart and great vessels."

The physiological mechanism by which this is accomplished is in brief that the gently-resisted movements, carried out as described and demonstrated dilate in turn the peripheral vessels in every section of the body, distend the lymph-spaces relieving the veins, thus employing for therapeutic purposes the pumping action of the muscles and securing increased filling of the arteries and better emptying of the heart. In other words, by increasing the volume of circulation in both arteries and veins, by better filling of the vascular system generally, including lymph-channels and lymph-spaces, and thus affording a much larger peripheral area for the blood, the left heart is better emptied by forcing the blood into the capillaries, the arterioles, the larger arteries, the aorta, and back pressure upon the left auricle being relieved, the right heart is relieved through the pulmonary circulation, and thus the veins are still further emptied, the congested liver often markedly diminishing in size. In effect the peripheral pump is substituted for the central pump of the circulation, and the latter being able to contract upon the

lessened quantity of blood, now becomes able to do its work once more, and all this without the use of any drug.

I have here some careful notes of the case before us which have been made by Dr. West. It will not be necessary to read them in full. The patient, a widow, fifty-eight years old, came under observation at the Philadelphia Polyclinic on the second of October, 1896; having had influenza, of three weeks' duration, a year before, followed by dry pleurisy. For the past five years she has been subject to attacks of dyspepsia and nervousness. A good deal of mental disturbance had recently made her more nervous. In addition to the dyspeptic symptoms, she sought relief for dyspnea, constant, and increased on exertion, headache, vertigo and continuous palpitation of the heart which gave rise to a sound heard in the left ear. There is also at times a sensation of "stoppage" of the heart. While in high altitudes (Colorado) she was subject to fainting spells. On examination the heart was found dilated and displaced to the left, the apex-beat being in the sixth interspace one inch to the left of the nipple. Both sounds were feeble, the second being relatively accentuated. There was a faint, harsh systolic murmur, heard best at the aortic cartilage and feebly transmitted into the neck. The pulse was small, feeble, its rate 96, with the patient standing, the artery somewhat hardened. There was occasional intermittence. Small quantities of albumen and granular and hyaline casts were found in the urine. There was no edema.

Under treatment the heart has receded until the apex, from being one inch to the left of the nipple, is now permanently half an inch to the right of the nipple; and from the sixth interspace it has receded into the fifth. The sounds are stronger, the first markedly so, and the movement is more distinct, though perhaps softened in quality. Intermittence has ceased. The artery is larger, the beat fuller and slower; the record of today being 68 with the patient seated. The sphygmographic tracings which I exhibit, and which

were taken before, immediately after and ten minutes after the exercises on a number of occasions, the pressure being but slightly raised, as recorded, and the instrument and the observer being the same in each instance, show the great improvement in the fulness of the arteries and in the character of the beat. For instance, at the beginning of treatment there was scarcely any elevation of the lever and the tracing is markedly that of rigid, unfilled arteries—the tidal wave being wanting. This may be contrasted with the recent tracing in which the pulse is beginning to resemble a normal pulse, the elevation being, however, less than normal, and the tidal wave still obscured; for, of course, we have not given the patient new arteries. The patient has lost her unpleasant symptoms, except that there is still a slight noise in the ear. In especial she has lost the extreme depression and dread of suffocation which was the most distressing feature of the case.

The albumen has disappeared from the urine and I find that similar cases are also recorded by Dr. Schott and Dr. Thorne. In another Polyclinic case, one of mitral regurgitation and interstitial nephritis, the albumen was markedly diminished but did not entirely disappear. However, the patient felt so much better, her edema having gone, and her dyspnea being relieved, that she declared she was well and went back to work. For this reason I was unable to bring her before you this evening. In conclusion let me say that this is but a preliminary communication to call your attention to the subject, in the effort to atone as much as possible for my long neglect of the method, by doing my share to make its merits more widely known.

From reading and limited observation, I believe the Nauheim system to be one of the greatest advances in the line of therapeutics without drugs that has yet been made; worthy to rank with Brand's cold-bath treatment of typhoid fever and the pneumatic treatment of pulmonary tuberculosis. It is more troublesome than the writing of pre-

scriptions, but, in suitable cases, much more effective.

Society Reports.

THE TRI-STATE MEDICAL ASSOCIATION

OF WESTERN MARYLAND, WESTERN PENNSYLVANIA AND WEST VIRGINIA.

SIXTH ANNUAL MEETING HELD AT CUMBERLAND,
MD., DECEMBER 3, 1896.

THE Association met at 1.30 P. M., in the Y. M. C. A. Building, Cumberland, Maryland, Thursday, December 3. The meeting was called to order by Dr. E. T. Duke, the presiding officer. Rev. Lewis Randall offered prayer.

Mr. Isaac Hirsch, a member of the City Council, delivered the address of welcome, to which Dr. A. G. Smith of Ocean, Md., responded on behalf of the visiting physicians.

Next followed the regular order of routine business. Drs. J. F. Graham of Piedmont, West Virginia, and J. G. Abbott of Shaw, West Virginia, were elected to membership.

The following physicians were present: Dr. A. Enfield, C. P. Calhoun, S. H. Gump, Bedford, Pa.; Dr. S. G. Statler, Alum Bank, Pa.; Dr. C. S. Hoffman, Keyser, W. Va.; Drs. E. H. Parsons, J. F. Graham, Piedmont, W. Va.; Dr. Wm. F. Barclay, Pittsburgh, Pa.; Dr. A. C. Harrison, Meyersdale, Pa.; Dr. F. L. Baker, Burlington, W. Va.; Dr. J. Oliver Loutz, Aurora, W. Va.; Dr. C. Foutche, Westernport, Md.; Dr. R. Taylor, Slavesville, W. Va.; Dr. Robt. Gerstell, Elk Garden, W. Va.; Drs. W. J. Craigen, F. W. Fochtman, G. H. Carpenter, E. T. Duke, J. M. Spear, W. F. Twigg, Geo. Broadup, Richard Gerstell, C. H. Ohr, Cumberland, Md.; Dr. C. Brotemarkle, Lonaconing, Md.; Dr. S. A. Boucher, Barton, Md.

Dr. J. Lee McComas, who had been appointed a representative to the Pan-American Medical Congress, was unable to be present. Drs. T. A. Ashby of Baltimore, and A. F. Spicker of Elk Lick, who were to have read papers, were unable to attend the meeting. It was decided to have a report of the

meeting published in the MARYLAND MEDICAL JOURNAL. A committee was appointed to have transactions of the Association published.

The committee on memorial introduced resolutions of respect to the memory of Dr. S. S. Good, formerly president of the Association, who resided in Meyersdale, Pa.; Dr. Thos. C. Price of Frostburg, Md., and Dr. J. B. Murdock of Pittsburgh, Pa., all of whom had died within the past year.

Dr. Charles H. Ohr read a paper entitled LA GRIPPE, which was listened to with marked attention, not alone on account of the paper, but from interest in the writer. Dr. Ohr is in his eighty-seventh year, is hale and hearty, with all of his faculties remarkably well-preserved, and is still in practice.

Dr. Wm. F. Barclay agreed with Dr. Ohr that the disease was of germ origin. He regarded rest in bed, diaphoretics and laxative treatment as all that was needed in simple cases. Peculiar nervous conditions which sometimes follow it require special treatment, as tonics, sea air or change of residence.

Dr. A. G. Smith thought the cases attended with high temperature required active treatment.

Dr. Richard Gerstell thought la grippe a serious affection. He had found that aged persons were most apt to be affected with pneumonia as a complication, the middle-aged with nervous diseases, and children with intestinal and stomachic troubles.

Dr. C. S. Hoffman spoke of the occurrence of pneumonia with few outward manifestations and advised thorough examination of the lungs in all cases, especially the aged.

Dr. Ohr closed the discussion.

Dr. T. A. Harris of Parkersburg, W. Va., reported AN INTERESTING CASE. The case related was of considerable interest not alone from a medical, but a legal, standpoint as well, and discussion followed bearing on malpractice suits and remedies to prevent them.

Dr. Barclay advised that the members of the profession of medicine should stand together and protect one another,

instead of advising suits for malpractice against members of the profession, as is so often done.

Drs. Gerstell, Carpenter, Hoffman, Ohr and others all voiced the same sentiments.

Since this meeting Dr. Harris writes that the case was thrown out of court. To the friends of Dr. Harris, who are familiar with the merits of the case, the news is welcome that he has been relieved of the annoyance and expense of a trumped-up case and to the profession at large it is of interest, as the success of a suit of this kind would encourage others to bring like cases into court. An effort will be made at the next meeting of the West Virginia Legislature to have the law regarding evidence in cases of this kind amended so that a party to the suit can be heard in his own behalf, which seems not now to be the case.

Dr. S. A. Boucher read a paper on the TREATMENT OF INEBRIATES. This closed the afternoon session.

The Association again met at 8 P. M. with Dr. Duke in the chair. The first paper of the evening was by Dr. Barclay of Pittsburgh, entitled THE SCIENCE OF GENERATION AND ITS PHENOMENA. (See page 299.)

Dr. H. W. Hodgson reported an interesting case of MUMMIFICATION OF THE FETUS. Discussion followed, participated in by Drs. J. M. Spear, W. F. Twigg, R. Gerstell, A. Enfield.

It was decided that the next meeting would be held at Bedford Springs in July. The Association then adjourned.

OVARIAN ABSCESS AFTER DELIVERY. —Bröse (*British Medical Journal*) relates that a woman, after confinement, had high temperature, which subsided, but the severe pain which accompanied it continued till, at the end of three months, when he operated. Both appendages were removed. The right ovary was converted into an abscess larger than a walnut, the left contained a smaller amount of pus. The left tube was also suppurating. The temperature had been normal just before the operation. Recovery was rapid.

MARYLAND Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, FEBRUARY 20, 1897.

WHEN one chooses the medical profession either as a means of livelihood, or for the purpose of scientific study, *The Physician in Literature.* he practically abjures all other pursuits and leaves behind him the hope of distinction in other callings. Modern medicine is so comprehensive and requires such an extensive knowledge, not only of the administration of drugs or the application of apparatus, but of various cognate sciences, such as chemistry, bacteriology, embryology, hygiene, etc., that one mind is too feeble to fully grasp the whole domain and one life too short to encompass it.

Medical men, therefore, usually limit their work to certain definite lines, either as specialists in some practical branch, or as experts in some less practical but equally important field of research. It occasionally happens, however, that some of our professional brethren, from one cause or another, are able to climb to greater heights than their less fortunate or less cultivated fellows and from these higher regions obtain a clear view of realms hidden from the sight of those who

toil on a lower plane. One of the most notable of this small group was the late genial Autocrat of the Breakfast Table, Dr. Oliver Wendell Holmes, physician, poet, philosopher, distinguished in every field to which he devoted his attention, yet had not a fortunate train of events given him leisure to pursue literature as a pastime, it is possible that we would never have had the rich legacy which he has left us.

Dr. John Brown of Edinburgh, whose charming yet pathetic story of *Rab and His Friends* has been read by thousands, perhaps by millions, on both sides of the Atlantic, is another who has risen above the general mass and was a physician and something more. At the present time, one of the most conspicuous instances of the ability of a physician to reach the highest pinnacle of professional eminence and at the same time to gather laurels in general literature is Dr. S. Weir Mitchell of Philadelphia, who is the author of several works of fiction. His latest production is now appearing as a serial in the *Century* magazine, beginning with the number for November, 1896. It is entitled "Hugh Wynne, Free Quaker," and treats of incidents coincident with the Revolutionary War and is of great interest not only as a pleasing story, but as a faithful picture of life in Philadelphia at that period.

There has recently come into our possession a volume of poems by Dr. Richard Henry Thomas, lately a specialist in diseases of the throat and nose in Baltimore City, but now an invalid striving to regain his strength in Italy. Dr. Thomas is not only well-known as a practitioner of his specialty, but as an earnest and eloquent minister of the Gospel of the Society of Friends. Three years ago he went abroad on a missionary visit, more especially to the Scandinavian countries, and as the result of overwork has been compelled to give up all active effort and to battle for his life. During his absence he published in London the little volume of poems already alluded to.

As might be supposed, the great majority of these are of a religious character and many of them have a tinge of sadness and suffering which is probably but a reflex of his own mental and physical distress. Whilst Dr. Thomas may perhaps never be enrolled in the ranks of the great poets, there is nevertheless much merit in his verses.

THERE are probably few diseases of children in which the physician is as likely to miss his diagnosis as in this. Pleurisy in the

*Pleurisy Under
Five Years.*

adult has an imposing array of physical signs and symptoms by which its presence may be determined. In the young child these are either absent, obscure or actually misleading.

In the first place no disease of the respiratory organs in the thorax may be suspected. The pain, which is sometimes insignificant, may be referred by the little sufferer to the head, leading, with other cerebral symptoms as screaming convulsions, etc., to a diagnosis of brain fever. The cough may be either too slight to attract notice, or so paroxysmal as to suggest whooping cough. Vomiting, colic or purging may be so severe as to draw attention away from the chest entirely. In subacute forms of pleurisy the respiration may be nearly normal. (The expiratory grunt or moan and working of the alae nasi are here worthy of attention as pointing to chest disease.) Fever may be so slight as to lead the observer to think he has a trifling ailment to deal with.

If attention is attracted to the chest the examination of its contents may give results so like those given by pneumonia that the best observers may falter in differential diagnosis. Distrusting ordinary physical signs he may have to base his diagnosis of pleurisy, on the severe pain, which points to pleurisy, on the absence of preëxisting or attendant bronchitis, which is always found in the variety of pneumonia most frequent in very young children (pure lobar or croupous pneumonia without bronchitis being then rare); on the displacement of the apex-beat of the heart, which does not occur in pneumonia; on the failure of such patches of percussion dulness and bronchial breathing as are present to change with the progress of weeks, as they would do in acute pneumonia; and finally, on the abstraction of fluid by a common hypodermic syringe, with large-bore needle, such as is furnished by instrument makers, when introduced at one or several of these points of dulness, under antisepsis, to the depth of not more than one inch.

So deceptive is the disease that the physician (as in a case quoted by Dr. Clemesha in an excellent article on this subject in the *Buffalo Medical and Surgical Journal* for December, 1896), may actually treat the

wrong side of the chest, thinking that the over-active respiration of the healthy side indicates disease, rather than the somewhat muffled respiration of the side in which the unsuspected pleurisy is situated.

In view of these facts it is well for the reader to be again put on his guard against the elusive pleurisy of children (of say five years and under) which may run its course with abundant exudation to death wholly unsuspected. It may be that a mental retrospect of past years will suggest cases which have always puzzled him but which might answer to this key.

The chest ought to be carefully and repeatedly examined for pleurisy in obstinate cases of supposed pneumonic consolidation which does not change its signs to moist rales after weeks of duration; in obscure wasting diseases; in every case of obscure brain or bowel disease; in all febrile diseases of early childhood where the temperature fails to fall after a reasonable time or, having fallen, shoots up again without known cause.

Crepitant rales, vesicular and bronchial breathing, tympanitic percussion, normal chest girth and tolerably natural thoracic movements are all compatible with pleuritic effusion in young children.

THE New York Legislature is now considering a bill to compel the makers of all proprietary and secret remedies to file an analysis of their products with the State Board of Health so that the Board may be able to distinguish between harmless and dangerous compounds.

It is not the intention to make these analyses public, but they are kept on record simply for the protection of the people and to be used in case of prosecution. This does not go as far as the German laws, which compel the analysis to be put on the outside of the bottle or box.

Such a law would kill the sale of patent medicines in this country and while it would be much better for the people to know what they are giving out good money for, still the proposed New York law is a compromise which ought to accomplish much good.

As long as the secrecy is maintained in the composition of these preparations so long will they prove attractive to the people, but with contents known their charm is lost.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 13, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		27
Phthisis Pulmonalis.....		27
Measles.....		
Whooping Cough.....	2	
Pseudo-membranous Croup and Diphtheria. }	22	5
Mumps.....	7	
Scarlet fever.....	23	
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	3	1

Some physicians of Baltimore have started an organization to fight dispensary abuse.

Bay View will have a trained female nurse in charge of the female insane and male nurses in the male department.

Dr. Wilfred M. McLeod of Poolsville, Montgomery County, Maryland, died last week, aged sixty years. He was graduated from Georgetown University Medical College in 1876.

Dr. Norval W. Littell died at his home in Baltimore last week, aged sixty-two. Dr. Littell was born in New Market, Virginia, and studied first at the University of Virginia but later went to Philadelphia, where he was graduated from the Jefferson Medical College in 1863.

Next Wednesday, February 24, will be College Day at the Woman's Medical College. The buildings will be open during the day and addresses will be made at night. Dr. John Ruhrah is the new lecturer on bacteriology. Dr. John R. Winslow has resigned on account of ill health.

Health Commissioner McShane is enforcing the laws by stopping the sale of milk from farms where cows are diseased. During 1896 the department inspector examined nearly 1200 cows, and notices were sent to proprietors of 172 stables to put the latter in condition in conformity with the law. The law regarding sweat shops has also been in

force some time, and notices to provide a certain amount of space for each worker in the shops have been served.

The Hospital for Crippled and Deformed Children having outgrown its present quarters at 6 West 20th Street, in Baltimore, will shortly move to its new building, 2000 North Charles Street, which has been purchased by the trustees. The Hospital has been established but fifteen months. The building contains two wards, twelve beds, a dispensary, two nurses' rooms, an operating room, a kitchen and a laundry. The needy poor are treated free. The institution is supported by voluntary contributions and finished its first year without debt. In 1896, 209 cases were treated at the hospital, 98 of which were cured and 89 were improved and are still under treatment. Ten were transferred to other institutions and 4 died. Besides a board of officers and lady managers it has the following staff: Surgeon in charge, Dr. R. Tunstall Taylor; Assistant Surgeon, Dr. N. E. B. Iglehart; Consulting Surgeons, Dr. L. McLane Tiffany, Dr. J. M. T. Finney; Consulting Physicians, Dr. William Osler, Dr. I. E. Atkinson, Dr. William F. Lockwood.

The report of the Johns Hopkins Hospital for 1896 shows that there were remaining in the hospital on February 1, 1896, 103 male and 112 female patients. During the year, 1761 males and 1626 females were admitted. There were discharged 1746 males and 1116 females as well, 3362 remaining in the institution on February 1, 1897. Of these, 2849 were white and 513 colored. In the medical department 1283 were admitted, against 1098 of last year, and in the surgical department 1207, against 1243 of last year. In the gynecological 871, as compared with 814. Number admitted to obstetrical department, 26. The number of days of hospital treatment have been 88,690, as compared with 86,289 in 1895, making the daily average 243. The largest number in one day was 295, and the smallest 190. The total number of visits to the dispensary were 62,718. Of these, 16,069 were for medical treatment, 11,104 general surgical, 7115 neurological, 4583 genito-urinary, 2983 children's diseases, 4167 gynecological, 594 obstetrical, 12 venereal, 5068 for treatment of diseases of the throat, 5174 skin, 4065 eye, 1252 ear, and 531 were admitted to the hospital.

Book Reviews.

ESSENTIALS OF PHYSICAL DIAGNOSIS OF THE THORAX. By Arthur M. Corwin, A.M., M.D., Demonstrator of Physical Diagnosis in Rush Medical College, etc. Second Edition, Revised and Enlarged. Philadelphia: W. B. Saunders, 925 Walnut Street. 1896. Price, \$1.25, net.

This is a sort of a syllabus made by the author for the use of his classes and afterwards expanded for general use. It is somewhat lexicon-like in its brevity, but answers the purpose for which it was written. The first edition is largely original and shows the author's manner of teaching, but in the second he has made use of larger works on the same subject. The book has evidently been needed from the rapid sale.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. For the Use of Students and Practitioners. By John H. Musser, M.D., Assistant Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (2d) Edition, thoroughly revised. In one octavo volume of 925 pages, with 177 engravings and 11 full-page colored plates. Cloth, \$5.00; leather, \$6.00. Lea Brothers & Co., Publishers, Philadelphia and New York, 1896.

This comprehensive manual has been thoroughly revised, but in it there are no radical changes. It is a most painstaking work and while rather full for the undergraduate, it is certainly of great use to him, but especially is it helpful to the physician uncertain of his diagnosis. The plates and illustrations are abundant. There is no material increase in the size of this volume.

A TEXT-BOOK FOR TRAINING SCHOOLS FOR NURSES; including Physiology and Hygiene and the Principles and Practice of Nursing. By P. M. Wise, M.D., Medical Superintendent, St. Lawrence State Hospital; Editor of the State Hospital Bulletin, etc.; with an introduction by Dr. Edward Cowles, Physician-in-Chief and Superintendent of the McLean Hospital, Boston, Mass. In two volumes. Volume I and II. New York: G. P. Putnam's Sons. 1896.

In this work the author has endeavored to include all that the nurse could need in a graduated course of study. The subject is taken up systematically and no part is neglected. There is perhaps almost too much in these two volumes which might have with better advantage been condensed in one, but as side reading with the help of a teacher they cannot but be of material assistance.

Current Editorial Comment.

THE MEDICAL LIAR.

Archives of Pediatrics:

PLAGIARISM is a personal sin, and he who thus sins does but little harm to his fellows. But quite different is the medical liar. He sins not only against himself, but against his fellows. It makes little difference whether he lies with the direct and deliberate intention of deceiving, or from criminal negligence in ascertaining the truth. It either case he is a public nuisance and an enemy to the profession.

DISCONTENT.

Southern Medical Record.

THERE is an undoubted tendency at present, and probably has always been, toward unfaith in the existing order of things in medicine. Disbelief in the efficacy of drugs with some amounts almost to complete infidelity. Dr. Holmes voiced this sentiment to the fullest when he made the remark that if all physic were thrown into the sea, it would be better for men and worse for the fishes.

PROFESSIONAL TACT.

Medical Record.

WHEN so much is said concerning the requisites for success in practice, one of the main means to the end—that of using tact with the patient—is too frequently left out of consideration. The possession of this in the highest degree is an evidence of genius, although the talent can be very successfully cultivated to the great benefit of both parties concerned. It is so important an element of success that it often takes precedence of sound learning, ripe judgment, and otherwise large attainments. The impression made upon the patient is the main thing, upon which must rest the ultimate chances of a good and paying practice. The doctor, to be a good business man, must practice his profession in a business-like way. He too often forgets that the patient is naturally a very selfish person, and that he takes no more interest in the physician than that which centers on the possibility of being relieved from pain and in being ultimately cured. The doctor is expected to meet him on that basis of understanding and nothing more and should not talk too much about himself and his own affairs.

Publishers' Department.**Society Meetings.****BALTIMORE.**

- BALTIMORE MEDICAL ASSOCIATION**, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY**. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY**, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB**. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB**. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY**. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB**. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE**. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY**. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President, dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY**. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA**. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC**. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY**. Meets 1st Monday in each month. N. P. BARNES, M. D., President. W. F. BRADEN, M. D., Secretary.
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PROGRESS IN MEDICAL SCIENCE.

MODIFICATION OF COW'S MILK FOR ARTIFICIALLY FED INFANTS.—In order to prevent the firm clotting to which cow's milk is prone, some alkaline solution may be added, or some prefer to use a small quantity of a mucilaginous or other thickening substance, such as barley water, a solution of gelatin, or one of the prepared foods, which act mechanically in obviating the formation of firm clots. Mellin's Food may be used; in this the starch has been converted into dextrin and maltose. —From "Food in Health and Disease," I. Burney Yeo, M. D., F. R. C. P.

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AN AGREEABLE HYPNOTIC.—In many nervous affections attended with insomnia the physicians' efforts to secure beneficial sleep are frustrated by the abhorrence exhibited by the patients towards the majority of hypnotics. It is, therefore, extremely important in these cases to select a drug which will be palatable and which if necessary can be administered without the knowledge of the patient. In reviewing the list of hypnotics in common use we find that but few of them are possessed of this quality. In view of its freedom from taste and odor, Sulfonal has been found particularly useful in cases where the patient manifested a repugnance toward hypnotics. It can be readily administered in warm milk or other fluids, and never excites gastric or intestinal disturbance. The sleep produced is free from narcosis, being deep and refreshing, and if the drug had been properly administered in abundance of warm fluid there are practically no after-effects. Sulfonal is so safe a remedy that it has been extensively used in pediatric practice with advantage because of its palatability.

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PROGRESS IN MEDICAL SCIENCE.

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SYRACUSE, N. Y., Dec. 11, 1896.

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rule of principle not to give testimonials except I have proven the preparation to be of undoubted value.—Yours truly, JOHN A. ROBINSON, M. D., Professor General Medicine, Post-Graduate Medical School, Adjunct Professor to Practice of Medicine, Rush Medical College; Attending Physician for Throat Diseases and General Medicine Presbyterian Hospital, Etc., December 30, 1893.

DIRECTIONS for administering Mulford's Diphtheria Antitoxin, to be preserved for reference by those unfamiliar with the use of antitoxin. Furnished for physicians' convenience and mailed on receipt of request. The concentrated serums, potent and extra potent, give more prompt and efficient results, and are recommended. Dosage: For infants the average dose is 500 units (bottle No. 1); larger children and adults employ not less than 1000 units (bottle No. 2). In severe types and in nasal or laryngeal cases (membranous croup) or those not treated early, inject 2000 units (bottle No. 3). All injections should be repeated in from 6 to 12 hours if no improvement is noted. Mulford's Antitoxin is innocuous (being preserved with trikresol), and there need be no fear from over-dosage. For immunizing, 250 to 500 units ($\frac{1}{2}$ to 1 bottle of No. 1) should be employed according to severity of disease and health of patient exposed. Site of injection: Wherever the skin is loose, between the scapulae, or in the side of the abdomen. The site of injection should be thoroughly scrubbed and cleansed with an antiseptic solution. Sterilize syringe thoroughly, placing instrument in warm water and bringing gradually to boiling-point and boil for ten minutes.

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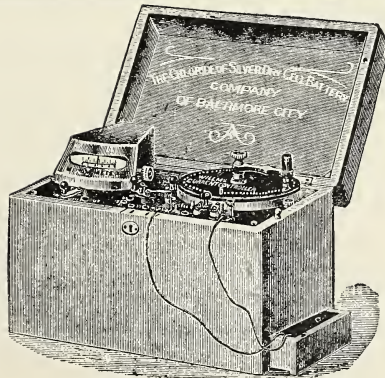
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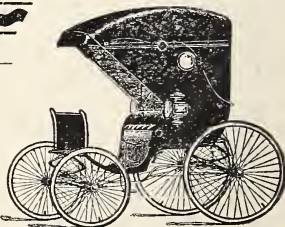
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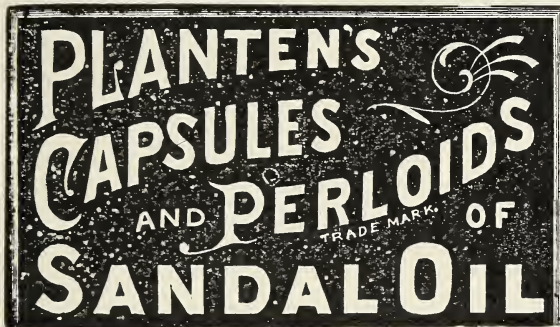
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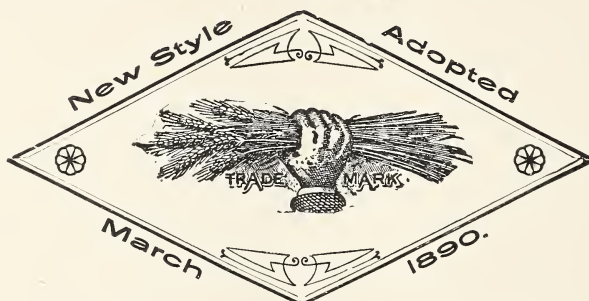
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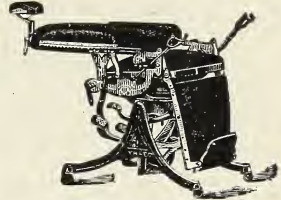


Fig. XVII—Dorsal Position.

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